

Inside Wallops

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NASA Safety System Steers Pilots Clear Of Close Calls

Overcrowded airports mean overcrowded runways, taxiways and ramps. On-the-ground collisions at the nation's airports are occurring more frequently, but NASA engineers have developed a way to keep aircraft on track and away from dangerous encounters. It is an advanced cockpit display system, developed at NASA's Langley Research Center.

The Runway Incursion Prevention System, or RIPS, would give pilots and air traffic controllers an early warning if another plane or ground vehicle is about to intrude onto the runway. Close calls between aircraft and ground vehicles or other planes, often called



Artist's Rendition

runway incursions, have grown steadily during the past decade. In the last five years there has been a 60 percent increase in near-collisions, according to the National Transportation Safety Board, with 320 incidents reported in 1999 alone. Reducing runway incursions has become the Federal Aviation Administration's number one safety priority.

Harry Verstynen, chief pilot from Langley, said the RIPS display has multiple uses. "Even for the large percentage of the time that you are not having a runway incursion," he said, "the displays that are being developed as part of this project will give the pilot significant improvements in situational awareness on the airport and taxiing in low visibility conditions."

Technicians equipped a NASA 757 aircraft with the experimental displays and computer systems. NASA and airline pilots made a number of overnight flight tests at Dallas-Fort Worth International Airport to evaluate the technologies. Their observations will be used to help refine the displays for possible use in airliners.

Airline pilots have given the system high marks. "We have made several recommendations on some changes, but overall it's a well-thought out system," said John Penney, Advanced Maneuvers Program Manager and Standards Captain B-757/767 of United Airlines.

"With a few minor adjustments, I think it's something commercial industry and aviation industry should take and grab hold of."

NASA's Runway Incursion Prevention System integrates several advanced technologies into a surface communication, navigation and surveillance system for flight crews and air traffic controllers. It combines a head-down display of an electronic moving map of airport runways and taxiways with a head-up screen that gives the pilot realtime guidance. The system shows and sounds alerts if another plane or vehicle is about to encroach onto the runway. RIPS also uses specially developed computer software, GPS signals and ground technologies developed by the FAA's Runway Incursion Reduction Program.

This research is part of the NASA Aviation Safety Program, which is a partnership with the FAA, Department of Defense, aircraft manufacturers, airlines and universities.

For more information on the NASA Aviation Safety Program visit: http://avsp.larc.nasa.gov

NASA and Parkside Students Unveil Space Experiments

Representatives from the NASA Wallops Flight Facility recently delivered to Parkside High School, Salisbury, Md., a student experiment that flew last month on the Space Shuttle Atlantis during STS-106.

The experiment included the study of the effect that the space environment has on a variety of materials such as seeds, film, mini cassette tapes and a radiation dosimeter.

The Parkside experiment was one of 13 that flew as part of the Space Experiment Module-08 in the Shuttle cargo bay. The SEM program, managed by the Wallops Flight Facility, is an educational initiative to increase access for space for students in kindergarten through the university level. Since its first flight in 1996, SEM has allowed tens of thousands of students in the United States and other countries to fly their experiments in space.

More information on SEM can be found at: www.wff.nasa.gov/sem

Goddard Selects Contractor Excellence Award Winners

NASA's Goddard Space Flight Center has selected three winners for the 2000 Goddard Contractor Excellence Award. The winners are: H&H Consolidated, Inc., Wallops Island Va.; Swales Aerospace, Beltsville, Md.; and ManTech International Corp. - Aerospace Technology Applications Center, Lanham - Seabrook, Md.

"The Contractor Excellence Award provides us with an opportunity to recognize those contractors who make a substantial contribution to the mission of Goddard and who are committed to the philosophy of continuous improvement as evidenced by their business practices," said Michael Kelly, the chairman of the Goddard"s Contractor Excellence Award evaluation committee.

To be considered for the award, applicants are asked to provide evidence of contract performance and customer satisfaction, meeting schedules, controlling costs, quality and productivity improvements, management commitment to continuous improvement, human resource utilization and strategic planning and long term research and development.

The winners of this year's award were chosen because of their outstanding continuous improvement efforts and contributions to Goddard's mission. Goddard Center Director Al V. Diaz presented the Excellence Awards to the winning companies on Oct. 11 at the 16th Annual Goddard Contractors Association 2000 Quality Symposium.

The three winners of the Goddard award will automatically be sent to compete for the George M. Low Award, which is NASA's Quality and Excellence Award. In addition, one of the previous year's Goddard Contractor Excellence Award applicants—Raytheon ITSS, Lanham, Md.—will be forwarded for consideration for the Low Award, the most prestigious award for quality given by NASA to industry.

Other finalists for the 2000 Goddard award were: TRW, Space & Electronics Group, Redondo Beach, Calif., Space Systems and Applications, Inc., Lanham, Md.; and Lockheed Martin Space Systems Company-Missiles & Space Operations, Sunnyvale, California.

Daylight Saving Time Ends Oct. 29 Set Clocks Back One Hour



A NASA scientific balloon was successfully launched from Ft. Sumner, N.M. on Oct. 16. The 11.82 million cubic foot balloon carried an IR, submillimeter astrophysics experiment for Dr. Phillip Lubin, the University of California, Santa Barbara. Total flight time was 9 hours 41 minutes.

Speaker's Bureau

Bill Krabill, Observational Science Branch, spoke to approximately 100, 8 – 12th grade science students at Worcester Preparatory School during Marine Science Week, Oct. 16 to 20.

Airfest 2000

Wallops personnel participated in the Accomack County Airfest 2000 held Oct. 21 at Accomack County Airport. Fire Department personnel, Joe Conaty and Brian Daffin were on hand with the Crash and Rescue Unit, the NASA C-130 Kingair and aircraft (below)were on static display with support provided by Willy Dykes, Chris Pali, Garry Drummond, Mike Hellis, Jim Darnela and Dave Easmunt. An inert Orion rocket was made available for display by Brent Weisiger and Bill Lankford. Keith Koehler and Betty Flowers staffed an exhibit and did children's hand's on activities.





Aerobics Club

A new six-week session of the Wallops Aerobics Club will start on Oct. 30. It's the time of year to exercise your right to vote and your right to good health!

Three one-hour evening classes will be held on Monday, Wednesday, and Friday and half-hour lunchtime classes will be held daily in the gymnasium. Come out and join in!

For more information, call Annette Conger, x2596, or check out the Wallops Aerobics Club web page at:

http://wwr.wff.nasa.gov/~ccsoft/wallops_aerobics/wac.htm

Beginner yoga class will be offered at lunchtime on Fridays. For more information, contact Lisa Brittingham at x2292



CFC Fun Day Celebration

The 2000 Combined Federal Campaign is well underway and as part of the yearly campaign there will be a Fun Day Celebration for all Wallops employees. Activities will include a volleyball tournament, bake sale, 50/50 raffle, chili cook off and a bakeoff.

Volunteers are needed to help out on Fun Day by cooking, serving as line judges for the volleyball tournament, collecting money and helping set up. Lunch includes hamburgers, hot dogs, chips, soda and entry to the festivities. The cost is \$3. Each organization is asked to donate at least two baked goods for the bake sale.

Anyone planning to participate in the volleyball tournament or entering the chili cook off or the bakeoff should register with CFC Chairperson, Catherine Donnelly, x1569, as soon as possible.

2000 Combined Federal Campaign

Many local, national and international voluntary agencies will benefit from your thoughtfulness and generosity through your contribution to the Combined Federal Campaign (CFC).

All Federal employees have the right to contribute or not contribute to the CFC. The choice is yours. Any contribution you make should be freely given.

Donation cards should be in by Oct. 26. If you haven't already contributed, take the time today and consider your donation.

Mark your calendar for:

* a spaghetti dinner 6:30 p.m. on Nov. 3. The menu is antipasto appetizers, spaghetti with tomatoe sauce or meatball sauce, salad, garlic bread, and homemade dessert. Tickets are \$6 for adults and \$3 for children under 12. For tickets call Pam Milbourne, x2020.

From FEDweek Oct. 18 Issue

Pay Raise Bill Clears Congress

Congress has sent to President Clinton the key spending measure for federal and postal employee and retiree programs, the much-delayed treasury postal appropriations bill for fiscal 2001 (part of HR-4516). The main provisions of interest are that the measure provides funding for a 3.7 percent average general schedule raise in January, while capping wage grade raises in fiscal 2001, which started October 1, at the average GS amount. The measure will repeal, effective at the end of this calendar year, the higher contribution toward retirement that federal and postal employees have been paying under a previous budget measure (a total of 0.4 percent of salary this year, with an additional 0.1 percent that would have begun in January 2001 without the repeal).

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